



Latrobe Valley Naturalist

July - August 2018

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Office bearers

President: David Stickney
Secretary: Rose Mildenhall
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Publicity Officer: Alix Williams
Magazine editor: Tamara Leitch
Conservation Coordinator: Denis Nagle
Archivist: Marja Bouman
Webmaster: John Sunderland

Contact

The Secretary
Latrobe Valley Field
Naturalists Club Inc.
P.O. Box 1205
Morwell VIC 3840
info@lvfieldnats.org
0428 422 461

Website

www.lvfieldnats.org

General meetings

Held at 7:30 pm on the
fourth Friday of each month
at the Newborough Uniting
Church, Old Sale Road
Newborough VIC 3825



Pale Vanilla-lily *Arthropodium milleflorum* photographed by Margaret Rowe at Lake Catani during the Club's summer camp at Mt Buffalo.

Upcoming events

July general meeting: Friday 27 July

Winter Members' Night

Excursion: Saturday 28 July – Tyers Park. Details TBC.

Botany Group: Saturday 4 August – Online resources for plant ID. Meet 10am at 31 Alison Street, Leongatha.

Bird Group: Tuesday 7 August – Traralgon Railway Reservoir Conservation Reserve. Meet by 9.30am at the carpark on Hickox Street.

August general meeting: Friday 24 August

Flora of the region between Perth and Geraldton – Phil Rayment

Excursion: Saturday 25 August – Peach Flat Community Wetland, Briagolong

Botany Group: Saturday 1 September – Walkerville heathlands. Details TBC.

Bird Group: Tuesday 4 September – EA Wetland survey. Meet by 9.30am at the Morwell Bridge gate, off old Princes Hwy.

Bird Group: Thursday 13 September – Bunyip State Park. Meet by 9.30am in the service centre carpark (west-bound) on Princes Hwy, Longwarry.

CLUB SUMMER CAMP 2018 – Part 2

The Gorge Heritage Walk – Sunday afternoon

After lunch near the Chalet at the Gorge Day Visitor Area, some of the party did the walk up the Monolith Track for wonderful views over the plateau.

The rest of us set off on the Gorge Heritage Walk, the start granting us superb views from various lookouts of the Crystal Brook Gorge, with its 300 metre sheer granite walls, and down over the Buckland Valley. In this area, we saw the rare Mt Buffalo Sallee *Eucalyptus mitchelliana*, which is restricted to the northern and north-eastern rim of the Mt Buffalo plateau where it is locally common among massive granite rocks.

We crossed Crystal Brook and commenced a loop track with interpretive signage telling the history of the pioneering Manfield family. James Manfield led the first party of tourists to the plateau in 1856 and his daughter Alice, born in 1879, first climbed the mountain before reaching her teens and subsequently spent her life observing and documenting the natural history of the area.

Under the shelter of a large granite tor, a patch of Bird Orchids *Chiloglottis valida* had finished flowering. Pale Vanilla-lilies *Arthropodium milleflorum* were widespread. The fire that had been through the area had resulted in multiple eucalypt seedlings fighting against one another for survival. A pardalote fluttered in and out of a nesting hollow.

The dominant vegetation on the walk was Alpine Oxylobium *Podolobium alpestre* with its identifying stipules. The various snow grasses with their fine blue-green leaves looked spectacular and attracted some interesting insects, and the patches of flowering Shrubby Platysace *Platysace lanceolata* made for a lovely display.



It was another interesting walk showcasing the vegetation and scenery of the plateau.

Shrubby Platysace (Photo: Tamara Leitch)

Lorraine Norden

Lake Catani – Monday morning

Parked under the gums at the picnic area on the shore of Lake Catani, we explored our surroundings. A patch of Bird Orchids at our feet was in seed and Royal Bluebells, deep blue-purple, were scattered among the low shrubs. A short walk towards the camping ground took us through gardens of knee-high Alpine Hovea, with its silky, dark green and rust-brown leaves. Keen photographers queued to record the crisp white blooms of Mueller's Snow-gentian.

On returning to the picnic shelter, we took a wide track, leading us anti-clockwise around Lake Catani. The winding shore of the lake, with clumps of bright green rushes, could be glimpsed between the gums on our left. At the time, we referred to the gums, with their attractive white,

grey and deep pink bark, as Mountain Gum *Eucalyptus dalrympleana*. However as Manna Gum and Candlebark also occur in the area, and as these three species are very similar, we weren't fully confident of the identification.

On our right, sheltered by a rocky outcrop, was a bank of Moth Daisy-bushes, their spherical puffs of tiny, feathery white 'parachutes' bursting to carry away their tiny brown seeds. Smaller shrubs and herbs included clumps of Pale Grass-lily in seed, Heath Tea-tree, Alpine Westringia, Leafy Bossiaea, Gorse Bitter-pea, Rough Coprosma, Drooping Beard-heath, seedlings of Elderberry Panax, tiny sprigs of Asperula and some grasses.



Branched Everlasting (Photo: Margaret Rowe)

Further towards the gully were Sticky Everlasting – striking clusters of white daisies, Branched Everlasting *Coronidium waddelliae* and bright-yellow blooms of Hoary Sunray *Leucochrysum albicans*. We descended and crossed the bridge over the creek below, and to the north of, the lake. Shrubs of Button Tea-tree, and a number of ferns, such as Fishbone Water-fern and Mother Shield-fern, lined the steep, rocky banks of the creek.

Here the Mountain Gums were joined by Snow Gums and Alpine Ash *Eucalyptus delegatensis*. The Alpine Ash stood tall and sturdy among scattered gums. Many of the plants were in bloom: Derwent Speedwell, Alpine Oxylobium, Alpine Pepper, Trigger Plant, Brachyscome, Royal Bluebells and Creamy Candles. On this side of the lake, Pale Vanilla-lilies were still in bloom. A close look at the flowers revealed pale mauve sepals and petals, and beautiful delicate stamens. The filaments of the stamens were clothed with soft, furry hairs, two-toned in cream and purple. The anthers were purple. A clump of Branched Everlasting bloomed prolifically, the Wax-berry carried clusters of pink and green berries, and Celmisia and Mountain Hovea were in seed. Here the path was close to the shore and we enjoyed striking views of an azure Lake Catani, with rocky rises on the horizon and a deep blue sky.

The path then led away from the lake, taking us along a narrow track across a bog to the road. We found a variety of bog plants similar to some of those seen on Dicksons Nature Walk on Saturday, including several small 'heath-type' shrubs and the golden flowers of Alpine Podolepis. Another surprise greeted us as we stepped up onto the roadside: the dainty mauve flowers of Gunn's Willow-herb *Epilobium gunnianum*. From there the circuit was completed by taking the road and then turning down a track leading through the vegetation to the picnic area. What an interesting and amazing variety of habitats and vegetation!



Lake Catani (Photo: Margaret Rowe)

Margaret Rowe

The Reservoir Picnic Area – Monday afternoon

After lunch our group headed to The Reservoir Picnic Area where there were a few options available. Although it was rather hot by now, most folk summoned enough energy to do some exploring. Most commenced with a stroll along Crystal Brook to the reservoir wall. This was built to provide water to the Chalet, which opened in 1910. Lake Catani was constructed as a recreational facility for the Chalet's guests, and was designed by Carlo Catani, a government engineer who also created Catani Gardens at the beach end of Fitzroy Street in St Kilda.



The bog along the track to Og, Gog and Magog
(Photo: Tamara Leitch)

There were plenty of wildflowers along this path to keep the botanists happy, and for me the Clustered Everlastings *Chrysocephalum semipapposum* were a picture.

Next we wandered along the hot, dry, rocky Mount McLeod Track for 300 metres, turning left onto a foot path beside an alpine bog that, if followed, would eventually lead to Og, Gog and Magog. Many more plants grew along this path including *Hovea montana* which had finished flowering, Alpine Pepper *Tasmannia xerophila* and Pale Vanilla-lily. The stamens of the latter were particularly delightful when viewed through a magnifying glass. The path was lined with *Podolobium alpestre*, the seed pods of which were cheerily snapping, cracking and popping in the hot air.

Back at the cars, David Stickney gave thanks to all the organisers, particularly Jay and Phil, and noted that this camp had a record 38 participants.

Julie Parker

Plant lists for the Mt Buffalo camp are available in Appendices I and II of this Naturalist.

Restoration of Corner Inlet and its tributaries

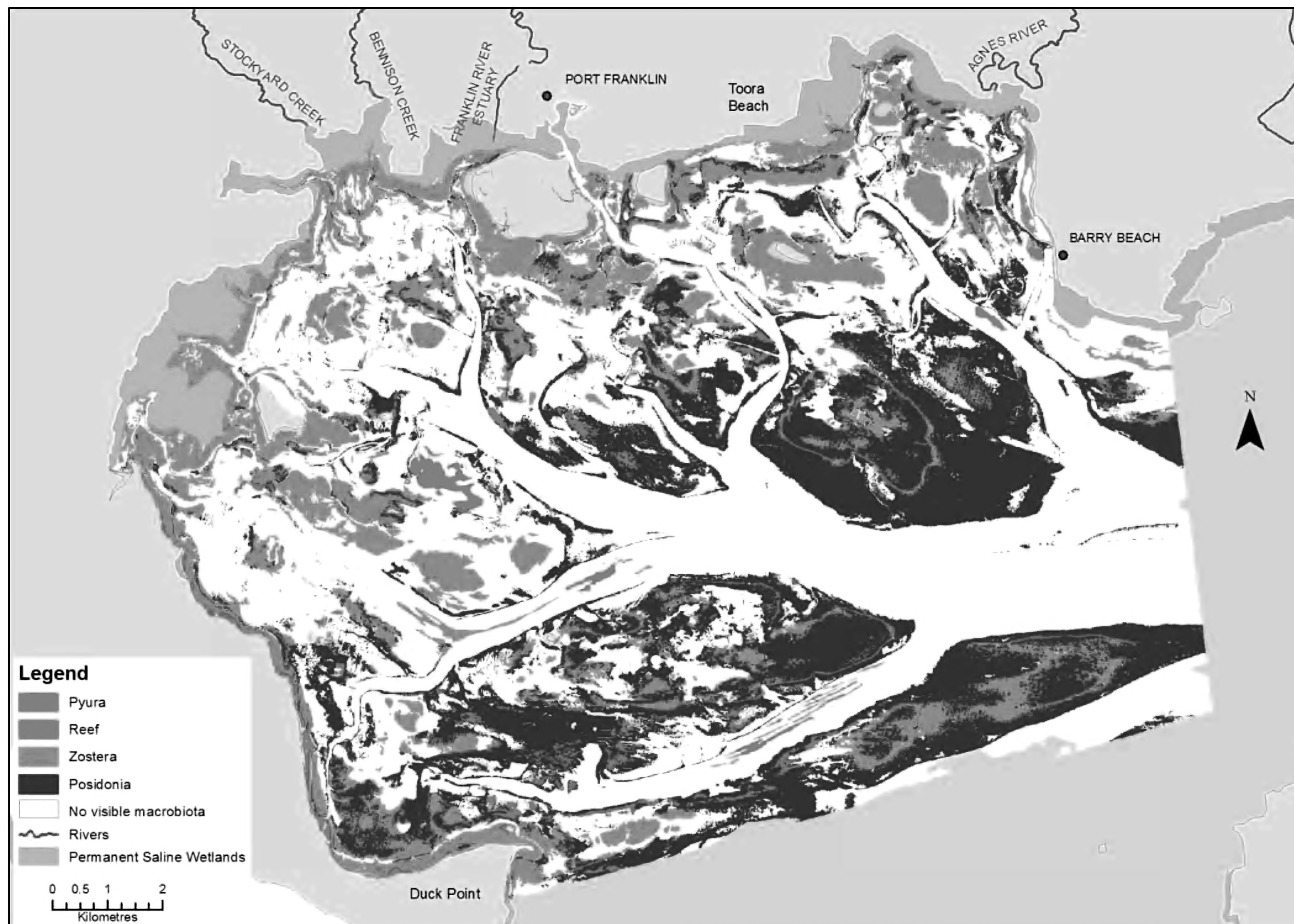
Matt Bowler from the West Gippsland Catchment Management Authority (WGCMA) spoke about the work his organisation is doing, in partnership with the local community, to protect Corner Inlet and its Ramsar wetlands. Matt displayed an impressive collection of maps and aerial photos to show that the waterways in the Corner Inlet catchment are short, and that the region is intensively farmed, especially as a dairying area.

The Ramsar wetlands extend east to Port Albert, and Manns and McLoughlins beaches. The Agnes, Jack, Tarra, Albert and Franklin Rivers rise near the Grand Ridge Road and then flow across the floodplain. Other smaller streams originate around Foster, Yanakie and Wilsons Promontory. Each of these approximately 70 catchments and sub-catchments has been assigned a number for planning purposes. The short length of many of these waterways means that excess nutrients from dairy farms reach the inlet very quickly.

Barrier islands Sand, Sunday and Snake Island protect Corner Inlet from wave action, and the inlet has exceptional kelp beds and seagrass meadows, which are habitat and critical breeding grounds for a large number and variety of fish species. Mangroves around the coastline are also important

habitat areas.

There are several species of seagrass with different tolerances for habitat disturbance. Broadleaf seagrass *Posidonia australis* recovers slowly from disturbance, and much of what has been monitored is old growth with little evidence of successful seeding. *Zostera muelleri* is a narrow-leaved species of seagrass that is fast growing, quick to recover and adaptable. Other mapped areas were reef with no visible seagrass, and areas colonised by sea squirts *Pyura stolonifera*.



Map of Corner Inlet showing areas of *Pyura* (blue), reef (orange), *Zostera* (light green), *Posidonia* (dark green) and permanent saline wetlands (purple) (Source: WGCMA).

Corner Inlet supports high numbers of birds, particularly waders, as it has large areas of intertidal mudflats. There is also a thriving commercial and recreational fishery in the inlet with boats operating from Port Welshpool, Port Franklin and Port Albert. It is currently Victoria's second most important commercial bay fishery.

The WGCMA has been able to foster partnerships between the dairying and fishing industry by, for example, taking farmers out on fishing boats to explain the inlet's ecosystems and discuss the threatening processes that land use practices can have on them.

Matt went on to talk about the threatening processes and what is being done to remediate existing damage and to prevent new threats impacting on the ecosystem.

Much work has been done to fence off and revegetate waterways. The Franklin River is a good example of a project that now has riparian vegetation coverage for the lowest 20 km of river. The

river rises in the Strzeleckis and joins Corner Inlet downstream from the sheltered anchorage of Port Franklin.

Willow infestations cause bank erosion by blocking stream flow. Removing willows and revegetating the riparian zone slows stream flow and reduces turbidity. The area's fertile soil, 1000 mm of annual rainfall and docile dairy cows make these riparian revegetation projects rewarding. Tree seedlings can become koala habitat within five years, and the fences don't need to be particularly robust.

Drains are a problem, as excess nutrients cause algal blooms in the inlet, and sea walls with one-way flap gates still exist. There are also farms in the intertidal zone, and some extend right to the edge of the mangroves near Toora. The former *Melaleuca* swamps are gone, but it is encouraging to note that there is still healthy woodland on the sand dunes.

Compaction by stock, previous straightening of some streams and salinity are all current problems that are gradually being addressed.

Rice grass *Spartina sp.* was planted initially in the 1920s to reclaim mudflats and provide out-of-season fodder for livestock. It may since have hybridised and has become an invasive weed that will penetrate stands of mangroves and take over their habitat. It also prevents the growth of saltmarsh and seagrass. Spraying programs, including helicopter spraying, are in place around Corner Inlet, but the grass remains a major problem around Inverloch.

In the Strzeleckis, previous government incentives for land clearing saw temperate rainforest replaced by bald hills. Some streams are infested with willows that need to be removed before they can be revegetated. To tackle the willows in steep and inaccessible terrain at the headwaters of some streams, Matt has been able to assemble a group of volunteers, including outdoor education instructors, willing to travel down various rivers and streams in canoes, identifying willows and poisoning them with herbicide using a cut-and-paint or drill-and-inject technique. Fourteen kilometres of the upper Franklin River is now willow free.



Aerial photo of revegetation along the Franklin River (source: WGCMA).

There are several study areas set up in the headwater streams, and one interesting study of Blackfish over five years found that they often stayed in the same pool, and no tagged fish were found very far from their base location. Blackfish persist in remnant populations, occurring only in the upper catchment. Some have been relocated to other streams in an attempt to boost their numbers.

As part of his presentation, Matt showed numerous maps, photos and projections of the landscape,

so when we drove across the Corner Inlet floodplain during the following day's excursion, it felt to me a bit like entering a virtual reality space. This was a very interesting and informative talk and the birds we saw the next day are no doubt benefiting from all the admirable work being put into trying to preserve their habitat and food sources into the future.

Jay Duncan

Corner Inlet excursion 24.2.18

Today's excursion was related to last night's excellent overview by Matt Bowler on the Corner Inlet water catchment. We stopped at a few sites along the shoreline of Corner Inlet to see the results of the work that the WGCMA has put into conserving it.

The weather was mixed, starting off with a still, humid summer's day followed by some gusty winds, the temperature falling as a cold front with fine rain moved through. We managed to avoid the worst of the bad weather and enjoyed a very informative day with Rohan Bugg.

Meeting at Port Albert, we commenced the day with a walk along the Old Port Trail to McMillan Bay, an estuary at the mouth of the Albert River. I wasn't sure how far the botanists went, but the birdwatchers walked as far as a plaque commemorating the controversial Angus McMillan. From several viewpoints we had extensive views of the islands, channels and mudflats of Corner Inlet. The bay hosted large flocks of waterbirds consisting of several hundred Black Swans, large flocks of Chestnut and Grey Teal, Great Egrets, White-faced Herons and White Ibis. There was a solitary Eastern Curlew, which is the largest of the world's shorebirds and has a very impressive, downcurved bill. There has been a significant decline of this species in recent years and it is now listed as vulnerable in most states and critically endangered at the federal level. The trail is an excellent site for orchids, but none were in flower in February, so we should plan a visit later in the year next time.

Next we visited Port Welshpool, stopping at the cemetery on the way to the port. Disappointingly, the site had recently been slashed, resulting in the removal of much of its native vegetation, so we moved on to the port. Although our expectations were quite low on what we might see, it proved to be an interesting stop and produced some of the highlights of the day for me.

We had noticed an abundance of Pacific Gulls in the area, and the reason was that they were scavenging fish scraps from the fishing boats. Stopping at the pier gave us the opportunity to see all the plumage variations of this species. The Pacific Gull takes at least four years to reach full maturity and there was an example of each stage on the rocks. The adults are identified by their size (the largest gull in the region) with a black back and a massive bill – to my mind, the most impressive gull in the world. The juveniles and immatures are mainly dark brown with a blackish bill. The immatures develop a black ring and an orange-yellow tip to both mandibles (see picture). It's a bit of a mystery to me how they manage to change colour, as the adult bird has a bright yellow bill with a red tip.



Immature Pacific Gull (Photo: David Stickney)

The highlight of the day for most people was seeing a fever of stingrays swimming under the pier (a group of stingrays is called a 'fever'). We counted four large stingrays, approximately two metres long and at least one metre wide. Thanks to Margaret who later identified the stingrays as Smooth Stingrays *Dasyatis brevicaudata*. It was surprising that the stingrays were here, because their normal diet is clams, shrimps and mussels, so I hadn't considered them to be scavengers.

We arrived at Toora Bird Hide when the tide was at its lowest, so the birds were quite distant, which is where David's telescope and keen eyesight proved valuable. He first spotted a Whimbrel on the shoreline and we eventually counted 11, all frantically feeding. These birds are quite uncommon in Victoria and it's unusual to see them in such numbers as they are usually solitary. We concluded that they were flocking prior to their migration to northern Russia. David also spotted a Sooty Oystercatcher among the Pied Oystercatchers, which is also unusual as their preferred habitat is along rocky shores. This is a bird endemic to Australia and has striking black plumage contrasting with a long, red bill and red eyes.

We offered a vote of thanks to our host, Rohan Bugg, for guiding us through his home territory and leading a very enjoyable day.

David Stickney

Identifying Peas with the Botany Group 3.3.18

The Botany Group were surprised to see Peter and I attend one of their events. We thought we would have a change of pace and see what we could learn about pea flowers, as we often see these when out on walks or birding, not just here in Victoria, but right across Australia, and we find it difficult to be certain about our identification.

Marja provided the group with some helpful diagrams for identifying the particular parts of the pea flowers and also gave us a spreadsheet listing many of the key characteristics of the various genera of pea flowers. This was most helpful as it noted which particular features of the plant (for example – flower colour, leaves, pods, or other) provide the best means of identification.

We noted the features outlined in Marja's spreadsheet and compared these with photos of particular species which Marja showed us on the "big screen", and from samples which were passed around, as well as consulting various field guides to check identifying features. We also noted where the particular species can be found.

I learnt that pea flowers belong to the family Papilionaceae (or Fabaceae) and can be divided into three main groups with the following features:

Group 1 – All stamens free at the base

Group 2 – All stamens joined at the base (open at top)

Group 3 – Like Group 2, but with 1 stamen free.

I also learnt that some features of pea flowers include: the standard, the wings and the keel.

My understanding was enhanced by Ken's helpful translation of some of the Latin words that the

various names of species originate from. For example: *Dillwynia sericea* (Showy Parrot-pea) where *sericea* translates to “silky”; *Podolobium ilicifolium* (Prickly Shaggy-pea) in which *ilicifolia* means “holly-leaved” and *Goodia lotifolia* (Golden-tip), where *lotifolia* translates to “leaves like a lotus”.



Platylodium montanum at Uralla Reserve (Photo: Wendy McDonald)

Wendy McDonald

Here’s one (left) I think I have correctly identified previously - *Platylodium montanum*. It was formerly known as *Platylodium formosum*. To confuse me a little more, the *montanum* species has been further divided into two subspecies in Victoria. I’m not sure which subspecies this belongs to.

However, I felt I learnt quite a lot about identifying pea species and feel more confident that next time I spot a pea flower out in the bush, I will be able to identify it. Thanks to Marja for a most informative morning.

SAVE THE DATE

Birdlife Australia Challenge Count 2018, November 29 – December 2

During December, instead of our ordinary monthly excursion, members of the LVFNC, their relatives and friends take part in the Australia-wide Bird Challenge Count. This year will be the 20th year since our Club started participating. To cover all the sites, we are planning to make it an ‘extended weekend’, starting on a Thursday.

Participants are divided into groups and visit a series of sites where they observe and count birds. Some people are able to identify the birds, while others assist by spotting and counting them. Each group starts around 8.30 am and finishes mid-late afternoon.

Data on the types and numbers of birds are recorded and sent to Birdlife Australia. This information provides an idea about bird populations and movement in this area.

Thursday Nov 29	Group 1: Energy Australia Wetlands, Crinigan Road Reserve
Friday Nov 30	Group 2: Edward Hunter, Moe Treatment Works, Lake Narracan
Saturday Dec 1	Group 3: Yarragon South, Uralla Reserve, Trafalgar Settlement Ponds
Saturday Dec 1	Group 4: Traralgon RRCR, Wirilda Environment Park
Sunday Dec 2	Group 5: Mathison Park, Morwell National Park
Sunday Dec 2	Group 6: Jeeralang Junction

Hopefully you will all be able to join in.

Alix Williams

REPORT ON BUSINESS MEETING 18.06.2018

Finance

Cash Management Trading Account: \$3,950.83 Term Deposit: \$17,219.73

Business Arising, Correspondence & General Business

- Club Spring Camp 19-22 October 2018: When Phil returns from overseas, he will work on the program further.
- Spending of Club funds: Denis has been in touch with Kylie Singleton (DELWP) and Helen Hoppner (Gippsland Plains Rail Trail Committee) about their support for replacing the signs at Dawson Railway Reserve, and has Helen's commitment to help cover some of the cost of printing the signs. Ken Smith has supplied a flora list produced by Bon & Ollie Thompson from 1985, and Denis obtained one from another source via John Topp.
- Conservation Coordinator of our Club: Denis Nagle cannot attend committee meetings during work hours. To enable him to attend, the next meeting will be at 5pm.
- Anyone interested in the Club's obsolete speaker and microphone equipment should contact David Stickney
- Reviewed arrangements for who brings the computer and decided David S will continue to bring his, and Rose will bring hers as backup. Discussed volunteers for setting up and unpacking – adequate for now
- Moe-Newborough Community Groups Forum was attended by Alix Williams who said it was interesting but not really relevant to our Club.
- Talia Duell's request for monitoring projects that might be able to utilise a scent-detection dog and handler: David S contacted Talia about Greater Gliders or Powerful Owls near Mirboo North, however Talia said her dogs have not been introduced to the scents of these species yet. As David S will be away for a while, and Rolf Willig, who may wish to be involved, is recovering from illness, David S will suggest they revisit the idea in September.
- Sapphire McMullan-Fisher's fungi guide: Crowd-funding webpage is up. The page has facility for pledges via credit card but not cheques. Sapphire said to wait until the week before the closing date of the crowd-funding (about 1 month away) before deciding options for payment of pledge. Around \$15,000 has been raised as of 17 June 2018 and their target is \$38,000.
- Ken Harris says preparation of the Moths of Morwell National Park book is progressing well.
- Nature of Latrobe booklet: a dozen copies requested for Tarra-Bulga information centre. At next month's meeting we will discuss reviewing the booklet to bring it up to date.
- South Gippsland Conservation Society has been donated copies of the Victorian Field Naturalist and Field Nats News from 2007-2012, and has offered them to our Club. Marja will pick through them to fill any gaps we have in our library, and the remainder will be offered to Club members.
- Natasha Hughes from Hazelwood North Primary School asked the Club if someone could talk to the students about plastic pollution. Rose has emailed Tamara Leitch who works for the EPA to see if she has a suggestion.

Conservation Matters

- Replacement of bridge on Traralgon-Tyers Rd: There is to be a VCAT hearing on 6 August. Phil will give a presentation on the issue when he returns.
- Declaration of Forest Park: According to DELWP, including College Creek in the forthcoming forest park declaration is not possible. Preparation of legislative plans for College Creek has been expedited.

Winter Members' Night

Various speakers

July's meeting is our annual Winter Members' Night, where Club members can present a short talk (~10 mins) on any topic related to natural history. A projector is available for showing Power Point presentations or photos, if required. If you would like to present to the group on this night, please register your interest by emailing David Stickney at david.stickney@westnet.com.au.



Guest speaker for August

Philip Rayment

Our Club's Vice President will speak about the flora he observed between Perth and Geraldton during a trip to the region in October 2016, led by members of the Western Australian Naturalists Club. This location is remarkable for its diversity and abundance of spring flowers, a high proportion of which are endemic to the area.



Latrobe Valley Naturalist is the official publication of the Latrobe Valley Field Naturalist Club Inc. The Club subscription includes the "Naturalist".

Brief contributions and short articles on any aspect of natural history are invited from members of all clubs. Articles, including those covering Club speakers and excursions, would typically be around one A4 side in length, should not exceed 1,000 words, and may be edited for reasons of space and clarity. Photos should be sent as an attachment and be a maximum of 1 megabyte in size.

Responsibility for the accuracy of information and opinions expressed in this magazine rests with the author of the article.

Contributions should
be addressed to:

Ms Tamara Leitch
The Editor
LVFNC Inc.
PO Box 839
TRARALGON VIC 3844

Phone: 0438 372 186

Email: tleitch@wideband.net.au

Deadline for articles to be considered for inclusion in the next issue (September/October): 10 September 2018

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APPENDICES

APPENDIX I – Plant list for Mt Buffalo National Park – upper areas: mountain plateau. 3 – 6 February 2018 (M. Rowe & L. Norden)

Mosses

Sphagnaceae	<i>Sphagnum cristata</i>	Sphagnum Moss
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Lycophyta

Lycopodiaceae	<i>Lycopodium fastigiatum</i>	Mountain Clubmoss
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Ferns

Blechnaceae	<i>Blechnum minus</i>	Soft Water-fern
Blechnaceae	<i>Blechnum nudum</i>	Fishbone Fern
Blechnaceae	<i>Blechnum penna-marina</i>	Alpine Water-fern
Blechnaceae	<i>Blechnum wattsii</i>	Hard Water-fern
Dryopteridaceae	<i>Polystichum proliferum</i>	Mother Shield-fern
Gleicheniaceae	<i>Gleichenia dicarpa</i>	Pouched Coral-fern
Pteridaceae	<i>Cheilanthes austrotenuifolia</i>	Rock Fern

Monocotyledons

Asparagaceae	<i>Arthropodium milleflorum</i>	Pale Vanilla-lily
Asparagaceae	<i>Lomandra longifolia</i>	Spiny-headed Matrush
Asphodeliaceae	<i>Dianella tasmanica</i>	Tasman Flax-lily
Asphodeliaceae	<i>Thelionema caespitosa</i>	Tufted Blue-lily
Cyperaceae	<i>Carex appressa</i>	Tall Sedge
Cyperaceae	<i>Carex breviculmis</i>	Short-stem Sedge
Cyperaceae	<i>Carex sp.</i>	Sedge
Cyperaceae	<i>Eleocharis sphacelata</i>	Tall Spike-rush
Juncaceae	<i>Juncus planifolius</i>	Broad-leaf Rush
Juncaceae	<i>Juncus sp.</i>	Rush
Juncaceae	<i>Luzula meridionalis var. flaccida</i>	Woodrush
Juncaceae	<i>Luzula modesta</i>	Southern Woodrush
Orchidaceae	<i>Chiloglottis valida</i>	Common Bird-orchid
Orchidaceae	<i>Gastrodia sesamoides</i>	Cinnamon Bells
Orchidaceae	<i>Prasophyllum alpestra</i>	Mauve Leek-orchid
Poaceae	<i>Anthoxanthum odoratum*</i>	Sweet Vernal-grass
Poaceae	<i>Dactylis glomerata*</i>	Cockfoot
Poaceae	<i>Microlaena stipoides</i>	Weeping Grass
Poaceae	<i>Poa helmsii</i>	Tall Mountain Tussock-grass
Poaceae	<i>Poa spp.</i>	Tussock-grass
Poaceae	<i>Rytidosperma spp.</i>	Wallaby-grass
Restionaceae	<i>Empodisma minus</i>	Spreading Rope-rush

Dicotyledons

Apiaceae	<i>Oreomyrrhis eriopoda</i>	Australian Carraway
Apiaceae	<i>Platysace lanceolata</i>	Shrubby Platysace
Araliaceae	<i>Hydrocotyle algida</i>	Mountain Pennywort
Araliaceae	<i>Polyscias sambucifolia</i>	Elderberry Panax
Araliaceae	<i>Trachymene humilis</i>	Alpine Trachymene
Asteraceae	<i>Brachyscome sp.</i>	Daisy
Asteraceae	<i>Brachyscome spathulata</i>	Spoon Daisy
Asteraceae	<i>Cassinia aculeata</i>	Common Cassinia
Asteraceae	<i>Cassinia longifolia</i>	Shiny Cassinia
Asteraceae	<i>Celmisia sp.</i>	Silver Daisy
Asteraceae	<i>Chrysocephalum semipapposum</i>	Clustered Everlasting
Asteraceae	<i>Cirsium vulgare*</i>	Spear Thistle
Asteraceae	<i>Coronidium monticola</i>	Pale Everlasting
Asteraceae	<i>Coronidium waddelliae</i>	Branched Everlasting
Asteraceae	<i>Craspedia gracilis</i>	Ashen Billy-buttons
Asteraceae	<i>Euchiton umbricola</i>	Cliff Cudweed
Asteraceae	<i>Hypochoeris radicata*</i>	Cat's-ear
Asteraceae	<i>Lagenophora stipitata</i>	Blue Bottle-daisy
Asteraceae	<i>Leptinella filicula</i>	Mountain Cotula
Asteraceae	<i>Leptorhynchus squamatus ssp. alpinus</i>	Alpine Billy-buttons
Asteraceae	<i>Leucochrysum albicans</i>	Hoary Sunray
Asteraceae	<i>Microseris lanceolata</i>	Alpine Yam-daisy
Asteraceae	<i>Olearia erubescens</i>	Moth Daisy-bush
Asteraceae	<i>Olearia lirata</i>	Snow Daisy-bush
Asteraceae	<i>Olearia phlogopappa subsp. flavescens</i>	Dusty Daisy-bush
Asteraceae	<i>Olearia ramulosa</i>	Twiggy Daisy-bush
Asteraceae	<i>Ozothamnus cupressoides</i>	Kerosene Bush, Scaly Everlasting
Asteraceae	<i>Ozothamnus secundiflorus</i>	Cascade Everlasting
Asteraceae	<i>Ozothamnus thyrsoides</i>	Sticky Everlasting
Asteraceae	<i>Podolepis robusta</i>	Alpine Podolepis
Asteraceae	<i>Senecio gunnii</i>	Silver Fireweed
Asteraceae	<i>Senecio linearifolius</i>	Fireweed Groundsel
Asteraceae	<i>Senecio phelleus</i>	Narrow Groundsel
Asteraceae	<i>Xerochrysum bracteatum</i>	Golden Everlasting
Asteraceae	<i>Xerochrysum subundulatum</i>	Orange Everlasting
Campanulaceae	<i>Lobelia surrepens</i>	Mud Pratia
Campanulaceae	<i>Wahlenbergia gloriosa</i>	Royal Bluebell
Caryophyllaceae	<i>Scleranthus biflorus</i>	Twin-flower Knawel
Caryophyllaceae	<i>Stellaria pungens</i>	Prickly Starwort
Celastraceae	<i>Stackhousia monogyna</i>	Creamy Candles
Ericaceae	<i>Epacris gunnii</i>	Gunn's Coral-heath
Ericaceae	<i>Epacris paludosa</i>	Swamp Heath
Ericaceae	<i>Leucopogon gelidus</i>	Beard-heath
Ericaceae	<i>Richea continentis</i>	Richea
Fabaceae	<i>Acacia alpina</i>	Alpine Wattle
Fabaceae	<i>Acacia obliquinervia</i>	Mountain Hickory Wattle
Fabaceae	<i>Acacia phlebophylla</i>	Buffalo Sallow Wattle
Fabaceae	<i>Bossiaea foliosa</i>	Leafy Bossiaea

Fabaceae	<i>Daviesia latifolia</i>	Hop Bitter-pea
Fabaceae	<i>Daviesia ulicifolia</i>	Gorse Bitter-pea
Fabaceae	<i>Hovea montana</i>	Alpine Hovea
Fabaceae	<i>Oxylobium arborescens</i>	Tall Oxylobium
Fabaceae	<i>Oxylobium ellipticum</i>	Common Oxylobium
Fabaceae	<i>Podolobium alpestre</i>	Alpine Oxylobium
Fabaceae	<i>Pultenaea tenella</i>	Delicate Bush-pea
Fabaceae	<i>Trifolium repens*</i>	White Clover
Gentianaceae	<i>Gentianella muelleriana subsp. muelleriana</i>	Mueller's Snow-gentian
Goodeniaceae	<i>Goodenia hederacea</i>	Ivy-leaf Goodenia
Goodeniaceae	<i>Scaevola hookeri</i>	Alpine Fan-flower
Haloragaceae	<i>Gonocarpus micranthus</i>	Creeping Raspwort
Haloragaceae	<i>Myriophyllum variifolium</i>	Varied Water-milfoil
Hypericaceae	<i>Hypericum perforatum*</i>	St. John's Wort
Lamiaceae	<i>Prostanthera cuneata</i>	Alpine Mint-bush
Lamiaceae	<i>Prostanthera monticola</i>	Buffalo Christmas-bush
Lamiaceae	<i>Westringia senifolia</i>	Alpine Westringia
Myrtaceae	<i>Baeckea gunniana</i>	Alpine Baeckea
Myrtaceae	<i>Calytrix tetragona</i>	Common Fringe Myrtle
Myrtaceae	<i>Eucalyptus delegatensis</i>	Alpine Ash
Myrtaceae	<i>Eucalyptus mitchelliana</i>	Mt Buffalo Sallee
Myrtaceae	<i>Eucalyptus pauciflora subsp. niphophila</i>	Snow Gum
Myrtaceae	<i>Kunzea peduncularis</i>	Mountain Kunzea
Myrtaceae	<i>Leptospermum grandifolium</i>	Broad-leaf Teatree
Myrtaceae	<i>Leptospermum micromyrtus</i>	Button Teatree
Myrtaceae	<i>Leptospermum myrtifolia</i>	Myrtle Teatree
Onagraceae	<i>Epilobium gunnianum</i>	Gunn's Willowherb
Orobanchaceae	<i>Euphrasia collina</i>	Purple Eyebright
Phyllanthaceae	<i>Poranthera microphylla</i>	Small Poranthera
Picrodendraceae	<i>Micrantheum hexandrum</i>	Box Micrantheum
Plantaginaceae	<i>Plantago euryphylla</i>	Broad Plantain
Plantaginaceae	<i>Veronica derwentiana</i>	Derwent Speedwell
Polygonaceae	<i>Acetosella vulgaris*</i>	Sheep Sorrel
Proteaceae	<i>Grevillea australis</i>	Alpine Grevillea
Proteaceae	<i>Grevillea victoriae var. victoriae sensu</i>	Royal Grevillea
Proteaceae	<i>Hakea lissosperma</i>	Mountain Needlewood
Ranunculaceae	<i>Clematis aristata</i>	Mountain Clematis
Ranunculaceae	<i>Psychrophila introloba</i>	Alpine Marsh-marigold
Ranunculaceae	<i>Ranunculus graniticola</i>	Granite Buttercup
Rosaceae	<i>Acaena novae-zelandiae</i>	Bidgee-widgee
Rosaceae	<i>Rubus parvifolius</i>	Small-leaf Bramble
Rubiaceae	<i>Asperula sp.</i>	Woodruff
Rubiaceae	<i>Coprosma hirtella</i>	Rough Coprosma
Rubiaceae	<i>Coprosma quadrifida</i>	Prickly Currant-bush
Rubiaceae	<i>Galium sp.</i>	Bedstraw
Rutaceae	<i>Boronia algida</i>	Alpine Boronia
Rutaceae	<i>Leionema phyllicifolium</i>	Alpine Phebalium
Rutaceae	<i>Phebalium squamulosum ssp. alpinum</i>	Forest Phebalium
Stylidiaceae	<i>Stylidium armeria</i>	Trigger-plant
Thymeleaceae	<i>Pimelea glauca</i>	Smooth Rice-flower

Thymeleaceae	<i>Pimelea ligustrina</i>	Tall Rice-flower
Violaceae	<i>Viola betonicifolia</i>	Showy Violet
Violaceae	<i>Viola hederacea</i>	Ivy-leaf Violet
Winteraceae	<i>Tasmannia xerophila</i>	Alpine Pepper
Ericaceae	<i>Epacris rhombifolia</i>	
Ericaceae	<i>Gaultheria appressa</i>	Wax-berry

*Introduced species

APPENDIX II – Plant list for Mt Buffalo National Park – lower areas: Rollasons Falls, Eurobin Falls & roadside. 3 – 6 February 2018 (M. Rowe & L. Norden)

Ferns

Aspleniaceae	<i>Asplenium flabellifolium</i>	Necklace Fern
Blechnaceae	<i>Blechnum nudum</i>	Fishbone Fern
Dennstaedtiaceae	<i>Pteridium esculentum</i>	Austral Bracken
Dicksoniaceae	<i>Calochlaena dubia</i>	Common Ground-fern
Gleicheniaceae	<i>Gleichenia dicarpa</i>	Pouched Coral-fern
Gleicheniaceae	<i>Sticherus tener</i>	Silky Fan-fern
Osmundaceae	<i>Todea barbara</i>	King Fern
Pteridaceae	<i>Adiantum aethiopicum</i>	Common Maidenhair
Pteridaceae	<i>Cheilanthes austrotenuifolia</i>	Rock Fern

Monocotyledons

Asparagaceae	<i>Arthropodium milleflorum</i>	Pale Vanilla-lily
Asparagaceae	<i>Lomandra filiformis</i>	Wattle Matrush
Asparagaceae	<i>Lomandra longifolia</i>	Spiny-headed Matrush
Asphodeliaceae	<i>Dianella tasmanica</i>	Tasman Flax-lily
Cyperaceae	<i>Carex breviculmis</i>	Short-stem Sedge
Cyperaceae	<i>Gahnia sieberiana</i>	Red-fruit Saw-sedge
Cyperaceae	<i>Lepidosperma gunnii</i>	Little Sword-sedge
Cyperaceae	<i>Lepidosperma laterale</i>	Variable Sword-sedge
Juncaceae	<i>Luzula meridionalis</i> var. <i>flaccida</i>	Woodrush
Orchidaceae	<i>Chiloglottis valida</i>	Common Bird-orchid
Poaceae	<i>Anthoxanthum odoratum</i> *	Sweet Vernal-grass
Poaceae	<i>Echinopogon ovatus</i>	Hedgehog Grass
Poaceae	<i>Microlaena stipoides</i>	Weeping Grass
Poaceae	<i>Poa sieberiana</i>	Grey Tussock-grass
Poaceae	<i>Poa</i> spp.	Tussock-grass
Poaceae	<i>Rytidosperma pallidum</i>	Silvertop Wallaby-grass
Poaceae	<i>Rytidosperma</i> spp.	Wallaby-grass

Dicotyledons

Apiaceae	<i>Platysace lanceolata</i>	Shrubby Platysace
Araliaceae	<i>Astrotricha linearis</i>	Narrow-leaf Star-hair
Araliaceae	<i>Hydrocotyle hirta</i>	Hairy Pennywort
Araliaceae	<i>Hydrocotyle laxiflora</i>	Stinking Pennywort
Araliaceae	<i>Polyscias sambucifolia</i>	Elderberry Panax
Asteraceae	<i>Cassinia aculeata</i>	Common Cassinia
Asteraceae	<i>Cassinia longifolia</i>	Shiny Cassinia
Asteraceae	<i>Cirsium vulgare</i> *	Spear Thistle
Asteraceae	<i>Erigeron bonariense</i> *	Flaxleaf Fleabane
Asteraceae	<i>Euchiton umbricola</i>	Cliff Cudweed
Asteraceae	<i>Hypochoeris radicata</i> *	Cat's-ear

Asteraceae	<i>Lagenophora stipitata</i>	Blue Bottle-daisy
Asteraceae	<i>Olearia argophylla</i>	Musk Daisy-bush
Asteraceae	<i>Olearia erubescens</i>	Moth Daisy-bush
Asteraceae	<i>Olearia lirata</i>	Snow Daisy-bush
Asteraceae	<i>Olearia phlogopappa subsp. flavescens</i>	Dusty Daisy-bush
Asteraceae	<i>Senecio phelleus</i>	Narrow Groundsel
Asteraceae	<i>Xerochrysum bracteatum</i>	Golden Everlasting
Bignoniaceae	<i>Pandorea pandorana</i>	Wonga Wine
Campanulaceae	<i>Isotoma axillaris</i>	Rock Isotome
Convolvulaceae	<i>Dichondra repens</i>	Kidneyweed
Dilleniaceae	<i>Hibbertia obtusifolia</i>	Grey Guinea-flower
Elaeocarpaceae	<i>Tetralochea sp.</i>	Pink Bells
Ericaceae	<i>Acrotriche prostrata</i>	Trailing Ground-berry
Ericaceae	<i>Acrotriche serrulata</i>	Honey Pots
Ericaceae	<i>Leucopogon gelidus</i>	Beard-heath
Ericaceae	<i>Monotoca scoparia</i>	Prickly Broom-heath
Fabaceae	<i>Acacia dallachiana</i>	Catkin Wattle
Fabaceae	<i>Acacia dealbata</i>	Silver Wattle
Fabaceae	<i>Acacia ketttlewelliae</i>	Buffalo Wattle
Fabaceae	<i>Acacia melanoxylon</i>	Blackwood
Fabaceae	<i>Acacia obliquinervia</i>	Mountain Hickory Wattle
Fabaceae	<i>Acacia phlebophylla</i>	Buffalo Sallow Wattle
Fabaceae	<i>Acacia pravissima</i>	Ovens Wattle
Fabaceae	<i>Bossiaea prostrata</i>	Creeping Bossiaea
Fabaceae	<i>Daviesia latifolia</i>	Hop Bitter-pea
Fabaceae	<i>Glycine clandestina</i>	Twining Glycine
Fabaceae	<i>Hardenbergia violacea</i>	Purple Coral-pea
Fabaceae	<i>Platylobium montanum subsp. montanum</i>	Mountain Flat-pea
Fabaceae	<i>Pultenaea mollis</i>	Soft Bush-pea
Gentianaceae	<i>Centaurium erythraea*</i>	Common Centaury
Geraniaceae	<i>Geranium potentilloides</i>	Cinquefoil Cranesbill
Geraniaceae	<i>Pelargonium australe</i>	Austral Stork's-bill
Haloragaceae	<i>Gonocarpus tetragynus</i>	Common Raspwort
Hypericaceae	<i>Hypericum gramineum</i>	Small St. John's Wort
Lamiaceae	<i>Prunella vulgaris*</i>	Self-heal
Malvaceae	<i>Lasiopetalum macrophyllum</i>	Shrubby Velvet-bush
Myrtaceae	<i>Eucalyptus chapmaniana</i>	Bogong Gum
Myrtaceae	<i>Eucalyptus dives</i>	Broad-leaf Peppermint
Myrtaceae	<i>Eucalyptus goniocalyx</i>	Long-leaved Box
Myrtaceae	<i>Eucalyptus macrorhyncha</i>	Red Stringybark
Myrtaceae	<i>Eucalyptus radiata</i>	Narrow-leaf Peppermint
Myrtaceae	<i>Kunzea peduncularis</i>	Mountain Kunzea
Myrtaceae	<i>Sannantha crenulata</i>	Fern-leaf Baeckea
Phyllanthaceae	<i>Poranthera microphylla</i>	Small Poranthera
Picrodendraceae	<i>Micrantheum hexandrum</i>	Box Micrantheum
Pittosporaceae	<i>Billardiera mutabilis</i>	Common Apple-berry
Plantaginaceae	<i>Plantago debilis</i>	Shade Plantain
Plantaginaceae	<i>Veronica calycina</i>	Hairy Speedwell
Polygalaceae	<i>Comesperma volubile</i>	Love Creeper
Polygonaceae	<i>Acetosella vulgaris*</i>	Sheep Sorrel

Proteaceae	<i>Grevillea alpina</i>	Mountain Grevillea
Proteaceae	<i>Lomatia fraseri</i>	Tree Lomatia
Proteaceae	<i>Lomatia ilicifolia</i>	Holly Lomatia
Ranunculaceae	<i>Clematis aristata</i>	Mountain Clematis
Rhamnaceae	<i>Spyridium parvifolium</i>	Dusty Miller
Rosaceae	<i>Acaena novae-zelandia</i>	Bidgee-widgee
Rosaceae	<i>Rubus anglocandicans*</i>	Blackberry
Rubiaceae	<i>Asperula pusilla</i>	Alpine Woodruff
Rubiaceae	<i>Asperula sp.</i>	Woodruff
Rubiaceae	<i>Coprosma quadrifida</i>	Prickly Currant-bush
Rubiaceae	<i>Galium sp.</i>	Bedstraw
Rutaceae	<i>Correa lawrenciana</i>	Mountain Correa
Santalaceae	<i>Exocarpos cupressiformis</i>	Cherry Ballart
Sapindaceae	<i>Dodonea viscosa</i>	Hop Bush
Stylidiaceae	<i>Stylidium armeria</i>	Trigger-plant
Thymeleaceae	<i>Pimelea axiflora</i>	Bootlace Bush
Violaceae	<i>Viola hederacea</i>	Ivy-leaf Violet

*Introduced species